

Title (en)
SUBMERGED PERIODIC RIBLETS

Title (de)
EINGELASSENE PERIODISCHE RIPPENSTRUKTUR

Title (fr)
RAINURES RÉCURRENTES NOYÉES

Publication
EP 3782904 A1 20210224 (EN)

Application
EP 20190400 A 20200811

Priority
US 201916547304 A 20190821

Abstract (en)
In one embodiment, a method for reducing drag includes forming a smooth surface (122) on a first portion (120) of a physical object (100). The method also includes forming periodic riblets (110) on a second portion (130) of the physical object. The second portion of the physical object is adjacent to the first portion of the physical object. Each riblet of the periodic riblets of the second portion of the physical object is depressed below a plane of the smooth surface of the first portion of the physical object. The method further includes generating a flow over the periodic riblets of the second portion of the physical object and over the smooth surface of the first portion of the physical object. A length of each riblet of the periodic riblets runs parallel to a direction of the flow.

IPC 8 full level
B64C 21/10 (2006.01); **F15D 1/00** (2006.01)

CPC (source: EP US)
B64C 21/10 (2013.01 - EP US); **F15D 1/004** (2013.01 - EP US); **F15D 1/12** (2013.01 - US); **B62D 35/00** (2013.01 - US); **B63B 1/34** (2013.01 - US); **B64C 2230/26** (2013.01 - EP US); **F03D 80/00** (2016.05 - US); **F15D 1/10** (2013.01 - EP); **F42B 10/42** (2013.01 - US); **Y02T 50/10** (2013.01 - EP)

Citation (search report)

- [XAI] DE 102017206968 A1 20181031 - 4JET MICROTECH GMBH & CO KG [DE]
- [XA] US 2011198444 A1 20110818 - DONG JIAN [US]
- [A] EP 2982599 A1 20160210 - BOEING CO [US]
- [A] EP 3085970 A1 20161026 - BOEING CO [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3782904 A1 20210224; JP 2021113607 A 20210805; US 2021231142 A1 20210729

DOCDB simple family (application)
EP 20190400 A 20200811; JP 2020139848 A 20200821; US 201916547304 A 20190821